



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/089,201      | 03/27/2002  | Udo Gartner          | 540608-2002         | 2371             |

20999 7590 03/27/2003

FROMMER LAWRENCE & HAUG  
745 FIFTH AVENUE- 10TH FL.  
NEW YORK, NY 10151

EXAMINER

MCCLLOUD, RENATA D

ART UNIT PAPER NUMBER

2837

DATE MAILED: 03/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/089,201

Applicant(s)

GARTNER ET AL.

Examiner

Renata McCloud

Art Unit

2837

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 March 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 8-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 8-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 12 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 12 provides for the use of an exhaust silence, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced. 35 U.S.C. 101 reads as follows:

### *Claim Rejections - 35 USC § 101*

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claim 12 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex*

*parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 8-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kullander et al (U.S. Patent 5,332,873) in view of Rauch (U.S. Patent 3,993,160).

**Claim 8:** Kullander et al teach an exhaust silencer, comprised of a gas-conducting pipe (Fig. 2:4) having openings of a defined cross-section (Fig. 2: openings below 4) and defined wall height, arranged in a silencer housing (Fig. 1:1,2,3) in such a manner that it runs through an axial series of silencer housing chambers insulated gastight from each other (Fig. 2: Chambers above and below 15), into which the openings (e.g. Fig. 2: openings below 4) of the gas-conducting pipe (Fig. 2:4) communicatively open, whereby the volumes of all chambers (Fig. 2: Chambers above and below 15) of the silencer housing (Fig. 1:1,2,3) in connection with the defined openings specifications of all openings (e.g. Fig. 2: openings below 4), and the gas-conducting pipe (Fig. 2:4) can be led through the silencer housing chambers (Fig. 2: Chambers above and below 15) in such a manner that the latter run through each of the silencer housing chambers at

Art Unit: 2837

least twice (Fig. 2), characterized by the fact that the gas-conducting pipe is constructed as a modular part for a two-part silencer housing (Fig. 1:1,2), and the modular part of a modular series of modular parts is configured with different opening characteristics, tuned to the same respective silencer housing chamber volumes (Fig. 2: 7,8, and openings below 4).

Kullander et al do not teach the openings of the pipe communicatively aligned with the respective silencer housing chamber are tunable to an interference frequency band from the noise spectrum of the exhaust gases to be dampened respectively. Rauch teaches the openings (Fig. 2:8) of the pipe communicatively aligned with the respective silencer housing chamber are tunable to an interference frequency band from the noise spectrum of the exhaust gases to be dampened respectively (Col. 1:16-40).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the muffler taught by Kullander et al to make the openings of the pipe communicatively aligned with the respective silencer housing chamber tunable to an interference frequency band from the noise spectrum of the exhaust gases to be dampened. The advantage of this would be a muffler that, within an overall size, obtains a wide range of differences of travel of waves so as to extend toward the low-pitch notes the frequency in which the muffler is effective.

***Kullander et al also teach:***

**Claim 9:** a U-shaped configuration (e.g. Fig. 2:7) of the pipe assembly in the silencer housing.

**Claim 10:** an S-form configuration (Fig. 2:7 and 8) of the pipe assembly in the silencer housing.

**Claim 12:** a muffler used in exhaust installations for motor vehicles (Col. 1:1).

7. Claims 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kullander et al and Rauch as applied to claim 8 above, in view of Wolf et al (U.S. Patent 5,979,598).

**Claim 11:** Kullander et al and Rauch teach the limitations of claim 8. Kullander et al and Rauch do not teach a gas-conducting pipe of die cast aluminum or plastic. Wolf et al teach a gas-conducting pipe of die cast aluminum or plastic (Col. 2: 65-3:1).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the muffler taught by Kullander et al and Rauch to make the gas-conducting pipe out of aluminum as taught by Wolf et al. The advantage of this would be a gas-conducting pipe that has substantial wall thickness without being unduly heavy.

### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Renata McCloud whose telephone number is (703) 308-1763. The examiner can normally be reached on Mon.-Thurs and every other Fri. from 8 am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Nappi can be reached on (703) 308-3370. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

Application/Control Number: 10/089,201


Page 6

Art Unit: 2837

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Renata McCloud  
Examiner  
Art Unit 2837

RDM  
March 19, 2003

  
ROBERT E. NAPPI  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800